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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/544,497	04/07/2000	Makoto Saito	990812A	1782

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EXAMINER

HUA, LY

ART UNIT	PAPER NUMBER
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2131

DATE MAILED: 11/06/2002

8

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/544,497

Applicant(s)

SAITO

Examiner

Ly V. Hua

Art Unit

2131

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 23-50 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☐ Claim(s) ____ is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2, 7.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

1. The Applicant is hereby informed that his request “line 31, delete “header” and insert --header--” in the Preliminary Amendment filed on October 11, 2000, has not been entered because it is not clear which of the “header” words in page 15, line 31, the Applicant is referring to.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
3. Claims 23-50 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
 - a. With regard to claim 23:
 - i. The usage of the phrase “to manage” at line 3 is vague and indefinite.
 - ii. The interact between the second step (i.e., the step of using) and the third (i.e., the step of decrypting) is not clear. It appears that the third step does not depend on a result, (if any, perhaps managed digital data), of the second step.
 - iii. It is not clear how the combination of the first and third steps in the claim support the management of the digital data set forth in the preamble of the claim. This is because the second step alone by itself appears to support the managment set forth to claim in the preamble.
 - iv. It is not clear how the combination of the first and third steps supports the management set forth in the preamble.

- v. The phrase “said utilization permit key being a ... key, a ... key, a... key ... and/or a... key” is confusing, if the “and” is taken, since it is not clear how a single key can be a different kind of keys.
- vi. The word “and” at the end of line 16, is not appropriate for using with the word “or” at line 4.
- b. With regard to claims 24-29:
 - i. These claims depend on claim 23 and thus inherit the matter of indefiniteness therefrom.
- c. With regard to claim 30:
 - i. This claim is a duplicate of claim 29. The applicant is to cancel either claim 29 or 30.
- d. With regard to claims 31-40:
 - i. These claims depend on claim 23 and thus inherit the matter of indefiniteness therefrom.
- e. With regard to claim 41:
 - i. The purpose for which the copyright information is added to the digital data is not clear.
- f. With regard to claim 42:
 - i. The purpose for which the specific constituents of the copyright information is included in the copyright information is not clear.
- g. With regard to claims 43 and 44:
 - i. The purpose for which the copyright information is added to the digital data (or more specific according to claims 43 and 44, in a file body of the digital data or in a file header of the digital data) is not clear.

h. With regard to claim 45:

- i. The phrase “said copyright management program” lacks antecedent basis.
- ii. The purpose for which the copyright information is added in the copyright management program is not clear.

i. With regard to claim 46:

- i. The purpose for which the copyright management program is added in a file body of the digital data is not clear.

j. With regard to claims 47 and 48:

- i. These claims depend on claim 41 and thus inherit the matter of indefiniteness therefrom.

k. With regard to claims 49 and 50:

- i. The purpose for which the digital data, which is without a copyright information, is encrypted is not clear.
- ii. The claim language is confusing. Note that if the statement “said digital data without said copyright information cannot be utilized” is true as recited in claim claim 47, on which these claims dependent, then it is not clear how the copyright management program can use it.

l. With regard to claim 50:

- i. It is not clear whether the copyright management program recited in this claim is the same as the copyright management program recited in claim 48.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 23-50 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lee et al ('613 hereinafter Lee) in view of Lynn et al ('508 hereinafter Lynn), Smid et al. ('233 hereinafter Smid), Bartoli et al ('351 hereinafter Bartoli), and Eyer et al ('577 hereinafter Eyer) .

a. Rationale for rejecting claims 23, 31, 32, 33, 34, 35, 36, 37 and 39 :

i. With the problems of indefiniteness and confusion addressed above in the rationale for rejecting claim 23 under 35 U.S.C. 112, second paragraph, the Examiner hereby:

- (1) takes the "and/or" to be just an "or" and accordingly interprets that the "utilization permit key" is singular, rather than plural; and
- (2) interprets that:
 - (a) the phrase "to manage said digital data" at line 3 can be read as:
 - (i) to secure said digital data,
 - (ii) to encode/encrypt said digital data,
 - (iii) to control usage of said digital data, or
 - (iv) to require decryption of said digital data before usage.

- (b) the single “utilization permit key” can be used for permitting different usages; and
 - (c) each of the entities, which are used for processing/using the digital data, has its own decryptor; but all of those entities use the same single “utilization permit key.”
- ii. Since the second step does not have interactive relationship with the combination of the first and third steps, the Examiner isolates the second steps from the combination of the first and third steps and addresses the second step separately from the combination of the first and third steps.
- iii. The second step:
 - (1) The second step claims using, to manage said digital data, a utilization permit key being a display permit key, an edit permit key, a storage permit key, a copy permit key, **and/or** a transfer permit key.
 - (2) With regard to the second step:
 - (a) Lee ('613) teaches using [by a combination of elements 37 and 39 in element 10 and by a combination of elements 53 and 61 in element 21] a key to manage [encode/decode/secure/protect] digital data [postage indicia data].
 - (b) Since the Applicant has left the second step hang by itself, it has no interactive relationship with the combination of the first and third steps.
- iv. The combination of first and third steps:
 - (1) A method comprising the steps of:
 - (a) encrypting digital data
 - (b) decrypting said encrypted digital data to decrypted digital data by using

- (i) said display permit key, and displaying said decrypted digital data;
- (ii) said edit permit key, and editing said decrypted digital data;
- (iii) said storage permit key,
 - 1) encrypting again said decrypted digital data to encrypted digital data by using said storage permit key, and
 - 2) storing said encrypted digital data;
- (iv) said copy permit key,
 - 1) encrypting again said decrypted digital data to encrypted digital data by using said copy permit key, and
 - 2) copying said encrypted digital data; and
- (v) said transfer permit key,
 - 1) encrypting again said decrypted digital data to encrypted digital data by using said transfer permit key, and
 - 2) transferring said encrypted digital data.

(2) With regard to the combination of the first step and the third step:

- (a) Official notice is hereby taken that the following are notoriously old and well known in the art:
 - (i) digital data can be:
 - 1) displayed on a display (or printed out in a piece of paper) for reading/viewing,
 - 2) edited if displayed, seen and intelligible,

- 3) saved/stored into memory/storage/disk,
 - 4) copied/duplicated, and/or
 - 5) transferred/transmitted/forwarded/sent from one entity to another entity;
- (ii) a piece of digital data secured by encryption must be decrypted by an entity which processes it for usage;
- (iii) for securing a piece of digital data, it can be encoded before:
- 1) storing into a memory/disk,
 - 2) copying from one storage/memory into another, and
 - 3) transferring from one entity to another entity.
- (b) Lee ('613) teaches a method comprising the steps of:
- (i) encrypting [by element 37]
- 1) digital data
 - 2) to produce encrypted digital data [as a result of any encryption] supplied [through element C11] to a user [element 21];
- (ii) decrypting [Abstract, lines 7-8]
- 1) said encrypted digital data [from element 10]
 - 2) to decrypted digital data [as a result of any decryption]
 - 3) by using a key ,
 - 4) [which decrypting step is:
 - I for purpose of displaying/[printing]:
 - II done] by using said display permit key,
[which key is a key that is used for decrypting encrypted data prior to printing/displaying],
and

III [followed by a step of] displaying/[printing]
said decrypted digital data.

(c) However, Lee does not explicitly teach that his decrypting is for:

- (i) editing purpose,
- (ii) storing purpose,
- (iii) copying purpose, or
- (iv) transferring purpose.

(d) With regard to decrypting for the purpose of editing:

- (i) Lynn ('508) teaches [at col. 11, line 30-37] receiver's decrypting of received ciphertext to produce original plaintext.
- (ii) Smid ('233) teaches [at col. 5, lines 11-12] editing a file when it is in plain text form.
- (iii) It would have been obvious to a person having ordinary skill in the art at the time the invention was made to:
 - 1) decrypt received ciphertext to produce plaintext for editing purpose, and
 - 2) realize that Lynn's key/[pseudo random sequence] is an edit permit key since it is used for decrypting ciphertext to plaintext, which plain text can be edited.

(e) With regard to decrypting for the purpose of storing:

- (i) Smid teaches [at col. 5, line 11-16]
 - 1) encrypting editable plain text/data and
 - 2) storing the result of that encryption
- (ii) It would have been obvious to a person having ordinary skill in the art at the time the invention was made to:

- 1) decrypt received ciphertext to produce plaintext for editing purpose [as taught by Lynn],
- 2) encrypt the plaintext prior to storing [as taught by Smid], and
- 3) realize that:
 - I a key {such as Lynn's key/[pseudo random sequence]} if used for decrypting data prior to editing it, can be named as an edit permit key since it is used for decrypting ciphertext to plaintext, which plain text can be edited, and/or if used for decrypting data and for encoding decrypted data prior to storing it, can be named as storage permit key, and
 - II a single key can be used for both encoding and decoding [as it is a common knowledge in the art that key code for encrypting/decrypting/encoding/decoding/encoding/deciphering/deciphering can be arbitrarily selected as long as a decoding/decrypting/deciphering of an encrypted/enciphered/encoded data can produce original data].

(f) With regard to decrypting for the purpose of copying:

- (i) Bartoli ('351) teaches [in his Abstract and col. 4, lines 55-59] for a purpose of outputting data to an input of a receptor [9]:
 - 1) decrypting

- I by using a key
- II encrypted data/[information stream] and
- 2) encrypting again [re-encrypting]
- I said decrypted digital data
- II to encrypted digital data
- III by using the same key used in the decryption,
and
- IV prior to output encrypted digital data/[a result
of decryption-encryption combination] to the
receptor [9].

(g) With regard to decrypting for the purpose of transferring:

- (i) Smid teaches [at col. 5, line 11-16]
 - 1) encrypting editable plain text/data and
 - 2) transferring/sending the result of that encryption
- (ii) It would have been obvious to a person having ordinary skill in
the art at the time the invention was made to:
 - 1) decrypt received ciphertext to produce plaintext for
editing purpose [as taught by Lynn],
 - 2) encrypt the plaintext prior to transferring/send [as
taught by Smid], and
 - 3) realize that
 - I a key {such as Lynn's key/[pseudo random
sequence]] if used for decrypting data prior to
editing it, can be named as an edit permit key
since it is used for decrypting ciphertext to
plaintext, which plain text can be edited,

and/or if used for decrypting data and for encoding decrypted data prior to storing it, can be named as transfer permit key, and

II a single key can be used for both encoding and decoding [as it is a common knowledge in the art that key code for encrypting/decrypting/encoding/decoding/encoding/deciphering/deciphering can be arbitrarily selected as long as a decoding/decrypting/deciphering of an encrypted/enciphered/encoded data can produce original data].

b. As per claims 24 and 25:

i. Lee, Lynn, Smid and Bartoli teach usage a crypt key to encrypt data.

c. As per claim 26, 27 and 28:

i. Eyer ('577) teaches [in col. 4, lines 48-54]

(1) Hierarchy of decrypting key used by particular decoders of particular subscribing units defined with particular access rights.

d. As per claim 29 and 30:

i. It would have been obvious to a person having ordinary skill in the art at the time the invention was made to:

(1)29 decrypt

(a) said encrypted digital data

- (b) only when said digital data is
 - (i) displayed or
 - (ii) edited
 - (c) to decrypted digital data; and
 - (2) encrypt
 - (a) said decrypted digital data
 - (b) again
 - (c) to said encrypted digital data
 - (d) when
 - (i) stored,
 - (ii) copied or
 - (iii) transferred.
- ii. The skilled person would have been motivated to do:
- (1) such decryption because:
 - (a) encrypted digital data are enciphered/scrambled/obscured, thus cannot be interpretable for purposes such as viewing and editing,
 - (b) decrypting encrypted digital data enables an individual viewer's interpretation of the message/data/code/images/information represented by the digital data and thus able to understand a display being displayed and thus able to make sensible editing; and
 - (2) such encryption because:
 - (a) Smid, Bartoli teaches
 - (i) encrypting
 - 1) digital data
 - 2) before
 - I storing,

II copying, or

III transferring.

e. As per claim 38:

i. It would be obvious to a person having ordinary skill in the art at the time the invention was made to:

(1) encrypt any entity which is to be made secured/obscured/scrambled.

(2) With respect to claim 40:

(3) It would have been obvious to a person having ordinary skill in the art at the time the invention was made to:

(a) encrypt, for security purpose, an entity that is to be secured as long as there is a decryption key that can be used to decrypt the encrypted entity.

f. As per claims 41, 43, 44, 47 and 48:

i. It would have been obvious to a person having ordinary skill in the art at the time the invention was made to:

(1) add copyright information to digital data.

ii. The skilled person would have been motivated to do such addition because:

(1) it is a common practice in the art of digital data security,

(2) an individual, viewing the digital data, would see the warning and would not dare to copy the digital data illegally.

g. As per claim 42:

i. It would have been obvious to a person having ordinary skill in the art at the time the invention was made to:

- (1) realize that a program is needed to control a computer/processor/microprocessor for its performance of adding certain information to certain data.
 - (2) use to program to add a certain information to a certain data.
- ii. The skilled person would have been motivated:
 - (1) to have such realization and to use such program because:
 - (a) a computer/processor/microprocessor would only perform such adding if there is a program to control it, and
 - (b) such usage is a common practice in the art; and
 - (2) to use a specific program (i.e., a copyright management program) for such function because:
 - (a) the function of the computer/processor/microprocessor relates to handling/managing copyright matter .

h. As per claim 45:

- i. It is a common practice in the art to adding management program to a digital data so that when the digital data is accessed the management program can also be retrieved for managing the accessing/utilization of the digital data.

i. As per claim 46:

- i. It would have been obvious to a person having ordinary skill in the art at the time the invention was made:
 - (1) to add a certain kind of information to a certain program;
 - (2) to add a specific type of information (e.g., copyright information) to a certain program; and
 - (3) to add a certain king of information to a specific program (e.g., a copyright management program).

- ii. The skilled person would have been motivated:
 - (1) to add a certain kind of information to a certain program because:
 - (a) it is a common practice in the art;
 - (2) to add a specific type of information (e.g., copyright information) to a certain program because:
 - (a) it is a common practice in the art; and
 - (3) to add a certain kind of information to a specific program (e.g., a copyright management program) because:
 - (a) it is a common practice in the art; and
 - (4) to add a specific type of information (e.g., copyright information) to a specific program (e.g., a copyright management program) because:
 - (a) it is a common practice in the art to add copyright information a program to prevent the program from illegal usage

j. As per claims 49 and 50:

- i. It would have been obvious to a person having ordinary skill in the art at the time the invention was made:
 - (1) encrypt
 - (a) any digital data
 - (b) under certain condition (e.g., the digital data is not protected (e.g., without a copyright information in it))
- ii. The skilled person would have been motivated:
 - (1) encrypt digital data that is without a copyright information in it because:
 - (a) without being encrypted, the digital data can be illegal used (e.g., viewed, copied, transferred, etc.) by an entity that is without authorization.

- iii. With regard to the matter of using the copyright management program to the encryption of digital data which is without a copyright information, the Examiner's position is that:
- (1) it would have been obvious to a person having ordinary skill in the art at the time the invention was made to:
- (a) use such program for such encryption because:
- (b) the computer/processor/micro processor's function of encryption relates to handling/managing copyright matter .

Double Patenting

6. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321© may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

7. Claims 31-37 and 39 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims of U.S. Patent No. 6,069,952 in view of Lee, Lynn , Smid and Bartoli as applied against claim 23 in the above 35 USC 103 rejection.

a. As per claims 31, 32, 33, 34, 35, 36, 37, 39:

i. With respect to claim 31:

- (1) Claims of Saito's Patent Number 6,069,952 claim using a copyright management program for managing utilization of digital data.

ii. With respect to claim 32, 33, 34, 36, 37, 38 and 39:

- (1) Claims of Saito's Patent Number 6,069,952 claim
 - (a) encrypting
 - (i) a program
 - (ii) by adding/encrypting a certain crypt key to the program
 - (iii) to an encrypted-program/utilization-permit-key/encrypted-crypt-key,
 - 1) which encrypted program is thus a program that includes the crypt key in it, or
 - 2) which utilization-permit-key is thus a key that includes the crypt key in it.

iii. With respect to claim 35:

- (1) It would have been obvious to a person having ordinary skill in the art at the time the invention was made to:
 - (a) use any available encryption key to encrypt an entity that is to be encrypted as long as there is a decryption key that can be used to decrypt the encrypted entity.

- iv. It would have been obvious to a person having ordinary skill in the art at the time the invention was made to use a copyright management program such as that in patent number 6,069,952 to manage utilization of data such as that in Lee, Lynn, Smid and Bartoli. This is because the patent '952 teaches such usage of copyright management program.

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

9. **Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks
Washington, D.C. 20231

or faxed to:

(703) 746-7239, (for formal communications intended for entry)

Or:

(703) 746-7240 (for informal or draft communications, please label "PROPOSED" or "DRAFT")

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington. VA., Sixth Floor (Receptionist).

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Ly Hua whose telephone number is (703) 305-9684. The examiner can normally be reached on Monday to Friday from 9:30 AM to 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gail Hayes, can be reached on (703) 305-9711. The fax phone number for this Group is (703) 305-3718.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-9600.



LY V. HUA
PRIMARY PATENT EXAMINER
ART UNIT 2131

L. Hua
November 4, 2002